

RESPONSE ACCOMPANYING RCE

Page -- 10 --

Remarks

Introduction

This paper presents arguments supportive of the patentability of the pending claims. In light of these arguments, applicants respectfully solicit the removal of the rejections and the issuance of a Notice of Allowability and Notice of Issue Fee Due in the above case.

Rejection under 35 USC§102(b) by U.S. Patent No. 5,647,641 to Sulosky et al.

The patent examiner has rejected claims 1-10, 13-17, 27, 31-34 and 37-38¹ as being anticipated by Sulosky et al. Applicants respectfully submit that this rejection is without merit and requests the removal thereof and the allowance of the claims.

Applicants have amended the claims to very clearly recite that the invention focuses upon a core breaker. In this regard, all of these claims require:

- in the preamble, a core breaker for use with a continuous mining machine used to cut earth strata and wherein the continuous mining machine has at least two spaced-apart cutting drums whereby each one of the cutting drums cuts the earth strata leaving a core,
- a core breaker support positioned mediate of the two cutting drums, and
- an elongate cutting tool adapted to impinge upon the earth strata of the core.

Applicants respectfully submit that the invention as defined by these claims is different from the disclosure of the Sulosky et al. patent.

The Sulosky et al. patent pertains to a road milling drum that comprises a drum with a plurality of bars affixed thereto. Each bar contains a plurality of cutting bits that, upon the rotation of the drum, impinge the roadway surface. The orientation of the bars is such so that the road milling drum cuts across its entire length. In the working environment of the Sulosky et al. structure, the road milling operation does not form a core in the sense of leaving a core via the operation of a continuous mining machine.

The Sulosky et al. structure is distinct from the claimed invention of these claims, which has as its focus the core breaker. None of the individual bar-cutting bit arrangements function as a core breaker for use with a continuous mining machine that has at least two spaced-apart cutting drums that cut the earth strata leaving a core since none of the bars are

¹ The rejection of claims 37-38 is moot in view of the cancellation thereof.

RESPONSE ACCOMPANYING RCE

Page -- 11 --

mediate of two cutting drums. None of the individual bar-cutting bit arrangements have a core breaker with a support positioned mediate of the two cutting drums. Certainly, the entire road milling drum is not a core breaker in that it cuts or mills across its entire length so that there is no core to break.

Applicants appreciate that one underlying basis for the rejections is that the Examiner has not given any patentable weight to the preamble. Instead, the Examiner has taken the position that the preamble is a mere statement of intended use, and hence, cannot be the basis for patentability. Applicants disagree with the Examiner's position.

MPEP 2111.02 (Rev. 3, August 2005) at page 2100-51 says that the determination of whether a preamble limits a claim is made on a case-by-case basis in light of the facts of each case. While there is no hard and fast litmus test defining when a preamble limits the claim, there are guideposts. Here, according to some of these guideposts, the preamble of the present claims must be given patentable weight; and when done so, these claims are clearly patentably distinct from Sulosky et al.

The preamble recites that the core breaker is for use in conjunction with a continuous mining machine that has two cutting drums. The body of the claim calls for the core breaker support to be positioned mediate of the cutting drums. Such a relationship shows that the preamble gives "life, meaning, and vitality" to the claim, and hence, should be given patentable weight. Pitney Bowes, Inc. v. Hewlett-Packard Co., 51 USPQ2d 1161, 1165-66 (Fed. Cir. 1999)².

Along this same line, the preamble presents structure in the recitation that the continuous mining machine has, "... at least two spaced-apart cutting drums ...". The body of the claim recites that, "... the core breaker comprising: a support positioned mediate of the two cutting drums, ...". Applicants submit that the preamble limits the structure of the body of the claim wherein this limitation is along the lines of In re Stencel, 4 USPQ2d 1071 (Fed. Cir. 1987)³.

² The Pitney Bowes case is cited in MPEP 2111.02 (Rev. 3, August 2005) at page 2100-51.

³ Referring to the In re Stencel decision, the MPEP 2111.02 (Rev. 3, August 2005) states at page 2100-51, "The examiner did not consider the preamble, which did set forth the structure of the collar, as limiting the claim. The court [Federal Circuit] found that the collar structure could not be ignored. While the claim was not directly limited to the collar, the collar structure recited in the preamble did limit the structure of the driver."

RESPONSE ACCOMPANYING RCE

Page -- 12 --

Applicants respectfully submit that the as amended claims require that the preamble be given patentable weight. With this being case, it is clear that Sulosky et al cannot anticipate (or render obvious for that matter) the invention per these claims under rejection.

For the above reasons, applicants submit that the rejection of these claims lacks merit and request the withdrawal thereof and the allowance of these claims.

Rejection under 35 USC§103(a) by Sulosky et al.

The patent examiner has rejected claims 11 and 12 as being anticipated by, or in he alternative obvious over, Sulosky et al. Claims 11 and 12 depend from claim 1 and are allowable for all of the reasons advance din support of the patentability of claim 1. Applicant respectfully requests the removal of the rejection and the allowance of the claims.

Rejection under 35 USC§103(a) by U.S. Patent No. 6,315,365 to Gerer et al. in View of Kennametal "Cutting and Drilling Systems"

The patent examiner has rejected claims 18-26, 28-30 and 35-36⁴ as being obvious over Gerer et al. taken in view of the Kennametal publication. Applicant respectfully submits that this rejection is without merit and requests the removal thereof and the allowance of the claims.

Gerer et al. pertains to a mining drum that includes a core breaker that includes bits 4, 5 and 6 wherein the drawings show that each one of these bits presents a different structure. In fact, the difference in structure between the bits is one of the important aspects of the Gerer et al. invention as described at Column 2, line 54 through Column 3, line 7 of Gerer et al.

Further, bits 4 and 5 are stationary. See Column 3, lines 54-56.

In reference to bit 6, Gerer et al. uses the term "parallel shank bits". See Column 4, lines 7-11. In the introductory portion of Gerer et al. (see Col, 1, lines 47-53), the term "parallel shank cutter" appears to be used in reference to U.S. Patent No. 4,669,786 to Morgan. Morgan teaches the use of a straight bore (see FIG. 3), and does not appear to teach any of the claimed bore geometries.

The Kennametal catalog shows a number of different kinds of bits.

⁴ The rejection of claim 36 is moot in light of the cancellation thereof.

RESPONSE ACCOMPANYING RCE

Page -- 13 --

Except for two different kinds of stationary bits, the only mounting assembly taught by Gerer et al. is the straight bore. In view of this fact taken along with the wide variety of cutting bits shown in the Kennametal catalog, applicants respectfully submit that the only kinds of cutting bits that could be properly combined with Gerer et al. are those that are designed to mount in a straight bore. What this means is that there is no teaching or suggestion or motivation to combine Gerer et al with any of the bits in Kennametal that show any type of geometry for mounting the bit other than a straight bore⁵.

With this being the case, it becomes clear that claims under rejection that recite

-- that the bore in the core breaker has an axial forward frusto-conical wall,
and

-- that when the cutting tool is retained in the bore, the frusto-conical shoulder
of the cutting tool is closely adjacent to the frusto-conical wall of the bore,

are patentably distinct over the combination of Gerer et al. and the Kennametal catalog. Applicants submit that such rejections should be removed and the claims allowed.

Conclusion

Applicant respectfully submits that the pending claims are allowable over the applied references. Applicant respectfully solicits the removal of the rejections and the prompt issuance of a Notice of Allowability and Notice of Issue Fee Due.

If the Patent Examiner disagrees with the applicant's position, but has suggestions to place claims in form for allowance, applicant urges the Patent Examiner to contact the

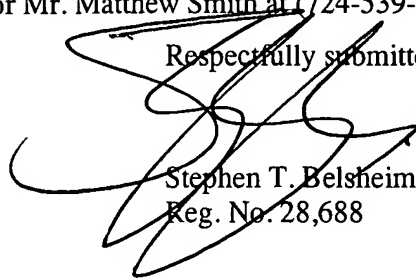
⁵ It is only with applicants' invention in mind that one skilled in the art would have even considered geometries along the lines of the claims in distinction to a straight bore. Hindsight is not permissible to use in formulating an obviousness rejection.

RESPONSE ACCOMPANYING RCE

Page -- 14 --

undersigned attorney (615-662-0100) or Mr. Matthew Smith at (724-539-3848).

Respectfully submitted,

A large, stylized handwritten signature in black ink, appearing to be 'S. T. Belsheim', is written over the typed name and registration number.

Stephen T. Belsheim
Reg. No. 28,688

179 Belle Forrest Circle
Suite 102
Nashville, Tennessee 37221
United States of America
Telephone: 615-662-0100
Facsimile: 615-662-0352
Customer No. 1400

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